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ABSTRACT

This paper presents a theoretical discussion of how students make educational behavior decisions including attending a given institution, transferring, or dropping out. The theory is seen to apply to students of all ages and both sexes with implications for all areas of postsecondary education. The theory holds that educational decisions are based on beliefs about the consequences of the specific behavior and on beliefs that certain "important others" favor, or oppose, the behavior. Use of the theory to develop positive attitudes and positive subjective norms in student recruitment efforts is illustrated with a hypothetical high school student considering attendance at a state university. Application of the theory in a total of seven studies with oral surgeons, librarians, and school teachers is noted. (20 references) (DB)

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Enhancing Student Recruitment:

A Theory for Understanding and Changing Student Decisions

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This paper was presented at the Thirty-First Annual Forum of the Association for Institutional Research held at The Westin St. Francis, San Francisco, California, May 26-29, 1991. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

Jean Endo
Chair and Editor
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Abstract

This paper provides a theoretical explanation of how students make decisions to perform--or not perform--educational behaviors. These behaviors include attending a given institution, transferring, or voluntarily dropping out. The theory applies to students of all ages and both sexes, and has potential applications in all areas of post-secondary education. Educational decisions are based on beliefs about the consequences of the specific behavior and on beliefs that certain "important others" favor, or oppose, the behavior. Knowledge of the specific beliefs that draw--or repel--students could be most valuable to those responsible for recruitment efforts. This paper also describes application of the theory in institutional research and reports the predictive results of seven studies that recently applied it.

Approaches to Understanding Student Decisions

The last two decades have seen a marked increase in efforts by colleges and universities to recruit and retain students. Institutional research has supported these efforts with a variety of research approaches. Regardless of the differences among these, many have in common the goal of providing information about how students make decisions about their behavior. Much early institutional research on students was primarily descriptive, as noted by Spady (1970, 1971) and Tinto (1975, 1986). Those two made seminal contributions toward a more explanatory research emphasis and were followed by others in the development and testing of models to predict and explain student behavior. Many of these models, however, include non-parsimonious combinations of variables both distal and proximal to the actual behavioral decision.

Following the tradition of marketing research, Cook and Zallocco (1983) have taken a more parsimonious approach. They used an expectancy-value model of attitude toward the institution to predict student preferences for, and attendance at, seven universities. Their conceptual definition of attitude is a set of beliefs that the institution has certain attributes and the importance the student attaches to each attribute. Trusheim, Crouse, and Middaugh (1990) applied this attitude model and found a significant, but fairly low (r = .27), relationship between attitudes toward the institution and enrollment decisions. From the perspective of the theory described in this paper, there appear to be at least two reasons for this low relationship.

First, an attitude toward an institution should not be expected to predict a decision about any specific behavior toward the institution.

Although such an attitude should predict an index of all possible behaviors toward the institution, for any specific behavior, prediction is likely to be low as found by Trusheim, et al. (1990). A specific behavior should be predicted better by an attitude toward performing that behavior than by a more general attitude toward the institution. (Attitude toward attending a given institution is based on the student's beliefs about likely consequences of attending, rather than on beliefs about attributes of the institution.)

Second, although many behavioral decisions are primarily influenced by attitude, others are strongly influenced by perceptions of social pressure concerning the behavior. For example, Sperber (1974) found the decisions of female high school students to be significantly influenced by perceptions of social pressure. Fishbein (1966) found the decisions of male college students to be based entirely on perceived social pressure.

The remainder of this paper is composed of three sections. The first provides an explanation of the theory, describing the variables and how they relate to form student decisions. The second section provides an example of decision formation and change, using a hypothetical sophomore in high school. The third section tells how to apply the theory, and reports predictive results from seven studies that recently applied it.

A Theory for Understanding Student Decisions

This theory is the work of Dulany (1961, 1968), Fishbein (1963, 1967, 1974), and Fishbein and Ajzen (1974, 1975) and was developed to predict and explain decisions to perform volitional behaviors. The theory has

been successfully applied to investigations of decision making by elementary and middle school students (Fortini, 1987), high school students (Sperber, 1974), traditional-age college students (Fishbein, 1966), and adult students (Pryor, 1990).

The theory appears to offer institutional researchers a useful tool for investigating how students make decisions about their behavior, whether the specific decision of interest is to attend post-secondary education, to attend a specific institution, to transfer to another school, or to voluntarily drop out. The next two sections of this paper focus on high school students' decisions about attending a given post-secondary institution. The discussion immediately below examines how these decisions are formed by attitude toward attending the institution and by perceived social pressure to attend or not attend. The role of beliefs in the formation of these two variables is then examined.

Formation of Decision

College-bound high school students begin forming their decisions about attending a given institution as soon as they first acquire information about it. This information may be obtained directly (as from visits to the campus), indirectly (as from brochures, teachers, or guidance counselors), or generated internally through inference processes. For example, on learning that a given institution has expensive tuition, students might infer that it provides high quality instruction.

This information about the institution leads students to form beliefs that influence the two variables that immediately determine the decision about attending. The first is attitude toward attending, which is

positive or negative feeling about attending a given institution. The second variable is subjective norm, which is perceived social pressure to attend, or not attend, the institution.

Formation of Attitude

Belief formation. The information students have about an institution leads them to automatically form beliefs about possible outcomes of their attending it. These outcome beliefs are cognitions that link the act of attending with certain outcomes that might result. Outcome beliefs can be directly accepted from many sources, including institutional advertising ("Be... all that you can be"). They can also be inferred from beliefs about the attributes of the institution.

Differences in values, experiences, and needs can lead students to infer different outcome beliefs from the same attribute beliefs. For example, belief that a university has a distinguished faculty might lead one student to infer "I'd learn an awful lot" while another student might think "I'd probably flunk out!" A third, and more cynical, student might believe "I'd get teaching assistants and never see a professor."

Belief salience. Not all outcome beliefs are important for the formation of attitude. Under most circumstances, people in general can attend to a maximum of about five to nine items of information at a time (Miller, 1956). Therefore, the theory holds that only those few beliefs which are uppermost in their minds, the salient outcome beliefs, will form attitude at any one time. (For example, students would probably believe that buying textbooks would be a consequence of attending a given institution, but it is unlikely that "buying textbooks" would be one of the outcomes uppermost in their minds.)

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Belief strength. Students are unlikely to consider all possible consequences of an action as equally likely, and the strength of a student's outcome beliefs will vary. Students will often have different judgements of the likelihood of a given outcome following a given act, and so strength of belief in the same outcome will differ among individuals and groups.

Evaluation of outcomes. Students will evaluate the same outcome in different ways. Disparities in values, experience, and ability can lead three different high school seniors to consider the outcome "get a challenging curriculum" as extremely good, slightly good, and quite bad. Attitude toward attending is formed by a set of beliefs about outcomes of attending, weighted by an evaluation of each outcome. Differences in evaluation of outcomes can often be as important as differences in belief strength in the formation of different attitudes.

Formation of Subjective Norm

As students consider attending a given institution, they not only form beliefs about outcomes of attending, they also form beliefs that specific persons or groups would approve, or disapprove, attending that institution. These "important others" are known as referents. Parents, close friends, pastor, teachers, and school counselor were among the referents identified in one study of high school students (Sperber, 1974).

These normative beliefs, about the expectations of referents are often inferentially derived. When students form a decision about attending a given institution, they consider the opinions of their important others, whether or not those referents have directly expressed their opinions.

Normative beliefs can be inferred solely from students' knowledge about the behavior and their referents' general preferences.

Some referents will be more important than others in determining subjective norm, for two reasons. First, students are more strongly motivated to comply with some referents than with others. Second, there are differences in belief strength about the expectations of a student's various referents. Well-known referents are more likely to have expressed a direct opinion on what institution the student should attend. Also, students will be better acquainted with the general preferences of well-known referents, even when they have not expressed a direct opinion.

Relative Importance of Attitude and Norm

All variables that are external to the theory--such as sex, ethnicity, and socioeconomic status--are mediated by attitude and norm. These external variables can influence behaviorial decision only by first influencing the outcome beliefs or evaluations that form attitude, or the normative beliefs or motivations to comply that form subjective norm. (This hypothesis can be empirically tested by including external variables in the regression of decision on attitude and norm to determine the amount of extra variance accounted for by external variables.)

The relative influence of attitude and norm on decision will vary according to the behavior, its context, and individual and group differences among students. For example, female college students' decisions about their sexual behavior were found to be primarily under attitudinal control, while males' decisions were under normative control (Fishbein, 1966).

It is therefore necessary to determine the relative influence of attitude and norm on the specific decision and for the specific population or sub- population of interest. Empirical weights for the relative value of each variable are obtained from the standardized regression coefficients that result from mulitple regression of the measure of decision on those of attitude and subjective norm.

A Theory for Changing Student Decisions

The information that college-bound students acquire about an institution leads them to form outcome and normative beliefs that determine their decisions about attending. Generally, the more information potential students have about the institution, the more outcome and normative beliefs they will have, the stronger these beliefs will be held, and the stronger will be their decisions to either attend or not.

To increase attendance, recruitment efforts must provide information to the students that will influence their decisions in a positive direction. Depending on the relative importance of attitude and norm, decision-change efforts may be directed to the set of outcome beliefs that form attitude, or toward the set of normative beliefs that form subjective norm. If attitude and norm are both important, change efforts might target both sets of beliefs.

We will first consider the initial formation and change of attitude, and then that of norm, through the example of a hypothetical, female, high school sophomore. We will see how her slightly negative decision about

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attending a specific institution is formed, and how it might be changed in a positive direction, by institutional recruitment efforts. The institution is the hypothetical "State University," a large, public university across the state from her hometown.

Attitude

In this example, the high school sophomore, although college-bound, has not yet given much thought to which specific institution she will attend. Her information about "State University" is limited--so far--to what she has acquired over the years from the mass media, and from teachers, relatives, and friends. This information leads her to form beliefs about likely outcomes of attending the institution. She believes that some of these outcomes are more likely than others, and she evaluates them differently. If measured on a seven-point, bipolar scale, the strength of her belief in each outcome would range from extremely likely (+3), to extremely unlikely (-3) through a midpoint of neither (0). Her evaluation of each outcome could be measured on the same scale with endpoints of extremely good (+3) and extremely bad (-3).

As "State U." is located across the state, she naturally believes it is extremely likely that attending would mean "being away from home." She has heard her older sister complain about long registration lines at another large university, and believes it is quite likely that attending "State U." would mean "standing in long registration lines." She has heard from older adults that "State U." is less expensive than the nearby private college, and believes it is quite likely that attending would mean "paying low tuition." She has also heard negative comments about the

academic quality at "State U." and believes it quite likely that attending would mean "getting poor instruction," "not having bright fellow students," and "using a poor library." She believes it slightly likely that attending such a large school would mean "being on an impersonal campus." Table 1 reports these outcome beliefs and evaluations. The belief-evaluation product for each outcome, in column three, represents the theoretical contribution of that outcome to her attitude. The sophomore's initial attitude toward attending the institution, is slightly negative, as shown in Table 1 by the -4 total of the belief-evaluation products. What information could a university recruiter provide to change her attitude in a positive direction?

Insert Table 1 about here

There are three ways to alter the set of outcome beliefs so as to change attitude in a positive direction. The first targets those outcomes that are negatively-evaluated, and attempts to reduce the strength with which they are believed. In this example, the four outcomes whose belief-evaluation products make the largest, negative contributions to attitude concern registration procedures and academic quality: of the instruction, fellow students, and the library. Although she believes all four of these to be quite likely (+2) consequences of attending "State U." these outcomes may be accurate or not. If accurate, these outcomes may present implications for changing some aspects of the institution's procedures or services. (Such as improving procedures for advanced registration to reduce the long lines.) If not accurate, the recruiter could provide

convincing evidence to correct these false impressions.

The second way to change attitude in a positive direction is to increase the belief strength of positively-evaluated outcomes. Of her two most positively-evaluated outcomes "paying low tuition" is the less strongly believed, only quite likely (+2). If this belief is truly accurate, providing her that information could raise her belief strength to extremely likely (+3), and the belief-evaluation product to +9, noticeably increasing that outcome's positive contribution to attitude.

The third way to change attitude in a positive direction is to provide information that adds new, positively-evaluated outcomes to the outcome belief set. This sort of effort must be based on an understanding of the values and interests of the target audience, as well as their outcome beliefs and evaluations. For example, suppose that the sophomore positively evaluates learning new skills and knowledge that will help her to build a career.

The recruiter could provide information about the many career services that are available to its students, and about the many women graduates who have built successful careers. If the sophomore accepted this information, she could form the belief that attending the institution would "help me build a good career." If she believed that it was extremely likely (+3) that this outcome would follow her attending, and if she evaluated it as extremely good (+3), the addition of this new belief would make a very strong positive contribution (+9) to her attitude. In Table 1, the initial set of belief-evaluation products totaled -4, and with only the addition of this single outcome, her attitude would change to +5, noticeably more positive.

Subjective Norm

As the sophomore began to acquire beliefs about outcomes of attending "State U," she also began to acquire beliefs about the expectations of her important others. Although none of these referents has directly stated an opinion about her attending the institution, she believes that some would approve, and that others would disapprove. She holds some of these beliefs more strongly than others and she is more motivated to comply with some referents than others. If measured on a seven-point bipolar scale, the strength and direction of her belief would range from extremely likely (+3) to extremely unlikely (-3) through a midpoint of neither (0). Her motivation to comply with each referent could be measured on a unipolar scale to take into account the unlikelihood that she would be motivated to do the opposite of what she believes her "important others" think she should do. Her motivation to comply with each referent would range from extremely motivated (+6) to not at all motivated (0).

As none of her referents has expressed an opinion about her attending "State U." the sophomore's beliefs are based on inferences about what they would want her to do. For example, her parents have said they would like her to stay at home to save on room and board, but have also said they can't afford to pay high tuition. She therefore believes it slightly unlikely that they would approve her attending "State U." Her boyfriend, who has a full-time job locally, has raised the possibility of their marrying after she graduates, and she believes it extremely unlikely that he would approve of her attending "State U." Her older sister, who attends college out-of-state, has repeatedly advised the sophomore to attend school away from home so she can "get out of the house!" The

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sophomore believes it is quite likely that her sister thinks she should attend "State U." The sophomore's referents are reported in Table 2, along with the beliefs and motivations to comply that form her negative subjective norm. The belief-motivation products in column three represent the theoretical contribution of each referent to that subjective norm. The sophomore's subjective norm is slightly negative, as shown by the -7 sum of her belief-motivation products. What information could a university recruiter provide her to change her norm in a positive direction?

Insert Table 2 about here

There are three approaches to changing the subjective norm in a positive direction. The first approach focuses on negative referents, those who are perceived as not wanting the sophomore to attend the institution. This approach targets the strength of normative beliefs. Two referents make the largest contributions to the negative norm in this example, parents and boyfriend. It is unlikely that the recruiter could provide any information to weaken her belief about her boyfriend's wishes, but the parents do present an opportunity. The recruiter could provide information about work-study opportunities, scholarships, and live-in dormatory jobs that would considerably reduce her expectations about parental disapproval.

The second approach to changing subjective norm focuses on positive referents, with whom the sophomore is strongly motivated to comply, such as older sister in this example. This approach involves increasing the

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strength of normative beliefs that these referents want the sophomore to attend. Her belief that her sister wants her to attend, might be increased by making comparison with the sister's university.

The third approach to changing subjective norm is to make the sophomore aware of new referents who would be perceived as wanting her to attend the institution, and with whom she would be motivated to comply. For the sophomore, such new referents might be occupational role models, or a highly successful, female graduate of the institution in the sophomore's hometown.

Applying The Theory

Belief data are collected from a subset of the study sample through in-person or telephone interviews, or through open-ended response category questionnaires. These data are content analyzed to produce sets of modally-salient outcome and normative beliefs concerning attending. These belief sets are then used to develop closed-ended questionnaire items.

The questionnaire obtains measures of the theory variables on seven-point, bipolar scales (except for motivation to comply measures which are unipolar). Probability scales measure the strength and direction of decision about attending, subjective norm, outcome and normative beliefs, and of motivation to comply with the referents. Evaluative scales measure attitude toward attending, and the evaluation of each outcome of attending. Probability scales rate statements on an _extremely likely_, _extremely unlikely_ continuum. Evaluative scales rate statements on an _extremely good_, _extremely bad_ continuum. The positive end of each scale

(likely/good) is scored +3 through a neutral midpoint of zero (neither), to -3 at the negative end of the scale (unlikely/bad).

It is important to note that referents, beliefs, and motivations to comply will not necessarily be the same for each sub-group of a population, or for different behaviors. The dimensions that seem likely to show differences include sex, age, ethnicity, the subjects' level of schooling, and socioeconomic status. However, the most important consideration is the behaviorial decision of interest. Decisions about joining a social club on campus and decisions about dropping out of school would likely elicit quite different sets of referents from the same sophomore. Data collection and analysis must take this into account, depending on the specific decision and sub-groups of interest.

Data are analyzed by stepwise multiple regression of the decision measure on those of attitude and subjective norm. Direct measures of those predictor variables are correlated with their estimated measures (summated outcome belief-evaluation and normative belief-motivation to comply scores). The instrument's reliability can be assessed by test-retest and alpha reliability coefficients. Convergent and discriminant validity can be assessed by Campbell and Fiske's (1956) multitrait-multimethod matrix.

Seven studies have applied the theory to the investigation of decisions about attending educational programs. The first of these (Pryor, 1990) of oral surgeons found the theory to account for just over 41% of the variance in decision. Subsequent proprietary studies by Pryor of three groups of librarians found the theory to account for 51%, 87%, and 89% of the variance. Studies of three groups of school teachers and

principals found the theory to account for 33%, 46%, and 63% of the variance in decisions about educational attendance. These values and the relative weights of attitude and norm in each study are report in Table 3 below.

Insert Table 3 about here

The theory described above appears to offer a useful approach for institutional researchers, in all fields of higher education, who are concerned with student decisions and student behavior. The seven studies reported above suggest the theory's potential for predicting and explaining how students make their decisions about educational issues and how those decisions might be most effectively influenced by institutional efforts. Further research will be needed to test the theory in a wider array of educational decision-making domains, and with a greater variety of student populations.

References

Ajzen, I., & Fishbein, M. (1969). The prediction of behavioral intentions in a choice situation. Journal of Experimental Social Psychology, 5, 400-416.

Campbell, D. T., & Fiske, D. W. (1956). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 56, 81-105.

Cook, R. W., & Zallocco, R. L. (1983). Predicting university preference and attendance: Applied marketing in higher education. Research in Higher Education, 19, 197-211.

Dulany, D. E. (1961). Hypotheses and habits in verbal "operant conditioning." Journal of Abnormal and Social Psychology, 63, 251-263.

Dulany, D. E. (1968). Awareness, rules, and propositional control: A confrontation with S-R behavior theory. In D. Horton & T. Dixon (Eds.), Verbal behavior and S-R behavior theory, (pp. 340-387). Englewood Cliffs, NJ: Prentice-Hall.

Fishbein, M. (1963). An investigation of the relationships between beliefs about an object and the attitude toward that object. Human Relations, 16, 233-240.

Fishbein, M. (1966). Sexual behavior and propositional control. Paper presented at the meeting of the Psychonomic Society.

Fishbein, M. (Ed.). (1967). Readings in attitude theory and measurement. New York: John Wiley.

Fishbein, M. (1973). The prediction of behavior from attitudinal variables. In C. D. Mortonson & K. K. Sereno (Eds.), Advances in communications research, (pp. 3-31). New York: Harper and Row.

Fishbein, M. (1982). Social psychological analysis of smoking behavior. In J. R. Eiser (Ed.), Social psychology and behavioral medicine (pp. 179-197). New York: John Wiley.

Fishbein, M., & Ajzen, I. (1974). Attitudes toward objects as predictors of single and multiple behavioral criteria. Psychological Review, 81, 59-74.

Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley.

Fortini, M-E. (1987). Attitudes and behavior toward students with handicaps by their nonhandicapped peers. American Journal of Mental Deficiency, 92, 78-84.

Pryor, B. W. (1990). Predicting and explaining intentions to participate in continuing education: An application of the theory of reasoned action. Adult Education Quarterly, 40, 146-157

Spady, W. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. Interchange, 1, 64-85.

Spady, W. (1971). Dropouts from higher education: Toward an empirical model. Interchange, 2, 38-62.

Sperber, B. M. (1974). Attitudinal and normative influence on the choice between career and homemaking orientations. Unpublished master's thesis. University of Illinois, Urbana.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis Review of Educational Research, 45, 89-125.

Tinto, V. (1986). Theories of student departure revisited. In J. C. Smart (Ed.), Higher Education: Handbook of theory and research, vol. II (pp. 359-384). New York: Agathon Press.

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Trusheim, D., Crouse, J., & Middaugh, M. (1990). College applicants' attitudes and enrollment decisions. Research in Higher Education, 31, 295-305.

Table 1

Beliefs of A Hypothetical High School Sophomore About Outcomes of Attending "State University"

Outcome	Belief	Evaluation	Product
Being away from home	+3	+3	+9
Standing in long registration lines	+2	-2	-4
Paying low tuition	+2	+3	+6
Getting poor instruction	+2	-3	-6
Not having bright fellow students	+2	-2	-4
Using a poor library	+2	-2	-4
Being on impersonal campus	+1	-1	-1
		Total	-4

Note. Both belief and evaluation measures are seven-point, bi-polar scales, scored from +3 (likely/good) to -3 (unlikely/ bad) through a neutral midpoint of zero (neither).

Table 2

Normative Beliefs of A Hypothetical High School Sophomore About Attending "State University"

Referent	Belief	Motivation to Comply	Product
Parents	-1	+5	-5
Older sister	+2	+4	+8
Boyfriend	-3	+4	-12
Close friends	+1	+4	+4
School counselor	-1	+1	-1
Teachers	-1	+1	-1
		Total	-7

Note. Both belief and motivation to comply measures are seven-point scales. The belief measure is a bipolar scale, scored in the same way as belief and evaluation scales in Table 1. The motivation to comply measure is a unipolar scale scored from 6 (extremely motivated) to 0 (not at all motivated).

Table 3

Prediction of Decision By Attitude and Subjective Norm in Seven Studies

Study	(n)	betas Attitude	Norm	R	R2
Oral Surgeons	(110)	.59**	.12	.63**	.40
Librarians-1	(15)	.79**	.33*	.94**	.89
Librarians-2	(13)	.85*	-.33	.71*	.50
Librarians-3	(20)	.83**	.07	.83**	.69
Principal-1	(109)	.44**	.30**	.63**	.40
Principal-2	(76)	.61**	.29**	.79**	.63
Teachers	(162)	.53**	.25**	.68**	.46

Note. All studies employed seven-point scales except for the three studies of librarians. Those studies employed 10 point scales and found high alpha reliabilities for the multi-item attitude measures and high correlations between single and multi-item attitude scales.

* $p < .05$

** $p < .01$